

JAN 3 0 2003 TECH CENTER 1600/2900

# In The Claims:

Please amend claims 1 and 52 - 54 as follows:

(Amended Four Times) A compound of the Formula I 1.

$$R^{1} \xrightarrow{N} CO_{2}H \xrightarrow{O} R^{2}$$

$$R^{1} \xrightarrow{N} CO_{2}H \xrightarrow{O} R^{2}$$

$$R^{2} \xrightarrow{O} R^{2}$$

$$R^{3}CO^{-}, R^{3}SO_{2}^{-}, R^{3}SO_{2$$

each  $R^a$  is independently hydrogen,  $C_1$ - $C_6$  alkyl, or -( $CH_2$ ) $_n$  aryl;

 $R^2$  is  $-(CRR)_n$ -aryl,  $-(CRR)_n$ -X-aryl, -(CRR)<sub>n</sub>-(substituted-aryl),  $-(CRR)_n$ -X-(substituted-aryl),  $-(CRR)_n$ -aryl-aryl,

> $\hbox{-(CRR)}_n\hbox{-aryl-(CH}_2)_n\hbox{-aryl},$  $-(CRR)_n$ -CH(aryl)<sub>2</sub>, -(CRR)<sub>n</sub>-cycloalkyl, - $(CRR)_n$ -X-cycloalkyl, (CH<sub>2</sub>)<sub>n</sub>—substituted aryl  $(CH_2)_n$  aryl, -(CRR)<sub>n</sub> -(CRR)<sub>n</sub> CH NH aryl , · (CRR)<sub>n</sub> (CRR)<sub>n</sub> (CRR)<sub>n</sub>· (CRR)<sub>n</sub>

Contid

Application No.: 09/284,42

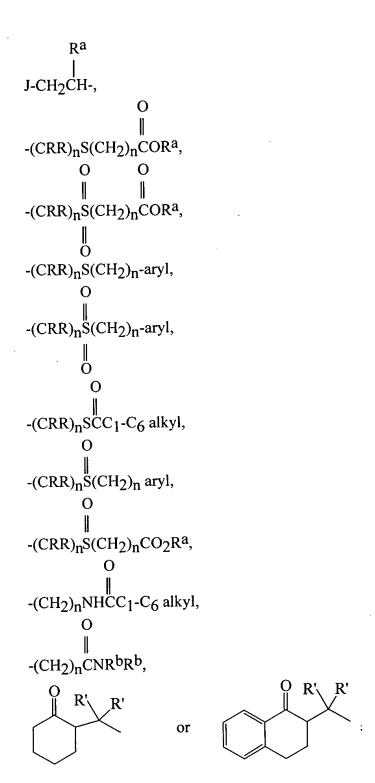
$$-(CRR)_n$$
, or  $R^4$ 
 $N$ 
 $(CHR)_n$ - or  $N$ 
 $(CHR)_n$ -

each R is independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, halogen or hydroxy;

X is O or S;

$$\begin{array}{c} R^3 \text{ is } C_1\text{-}C_6 \text{ alkyl}, \\ \text{aryl}, \\ \text{-}(CHR)_n\text{-}\text{aryl}, \\ \text{-}(CHR)_n\text{-}\text{substituted aryl}, \\ O \\ \parallel \\ \text{-}(CRR)_nCOR^a, \\ \text{-}(CRR)_nO(CH_2)_n\text{-}\text{aryl}, \\ \text{cycloalkyl}, \\ \text{substituted cycloalkyl}, \\ O \\ \parallel \\ \text{-}(CRR)_nCNR^aR^a, \\ O \\ \parallel \\ \text{-}(CRR)_n\text{-}S\text{-}(CH_2)_n \text{ aryl}, \\ \parallel \\ O \\ \\ \text{-}(CRR)_n\text{-}SC_1\text{-}C_6 \text{ alkyl}, \\ \parallel \\ O \\ \end{array}$$

CONTO



Conto

each R' is independently  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkylaryl, aryl, or hydrogen;

each J is independently  $\begin{array}{c} -\mathrm{CO}_2 R^b, \\ -\mathrm{CONR}^b R^b, \\ -\mathrm{SO}_2 N R^b R^b, \text{ or } \\ -\mathrm{SO}_2 R^b; \end{array}$ 

each Rb is independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, aryl, substituted aryl, arylalkyl, or substituted arylalkyl;

$$R^4$$
 is hydrogen,  $C_1\text{-}C_6$  alkyl,  $O$   $\parallel$   $CH_3OC$ -,  $O$   $O$   $C_1\text{-}C_6$  alkyl  $C$ -;

$$C_{1}\text{-}C_{6} \text{ alkyl C--};$$

$$R^{5} \text{ is } C_{1}\text{-}C_{6} \text{ alkyl-CO--}, \\ -(CH_{2})_{n}\text{aryl}, \\ O \\ \parallel \\ C_{1}\text{-}C_{6}\text{-alkyl-CC--}, \\ C_{1}\text{-}C_{6}\text{-alkyl-X-}(CH_{2})_{n}\text{CO}, \\ O \\ \parallel \\ -C_{1}\text{-}C_{6}\text{-alkyl-X-}(CH_{2})_{n}\text{OC--}, \\ O \\ \parallel \\ -C(CRR)_{n}\text{aryl}, \\ O \\ \parallel \\ -CNR^{a}R^{a}, \\ O \\ \parallel \\ -SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O$$

O O 
$$\parallel$$
  $\parallel$   $\parallel$   $\parallel$   $-C(CH_2)_nCNR^aR^a$ , O  $\parallel$   $-CO(CH_2)_n$  aryl, O  $\parallel$   $-CO(CH_2)_n$  substituted aryl, O O  $\parallel$   $\parallel$   $\parallel$   $-C(CRR)_nNHCO(CH_2)_n$ -aryl, O  $\parallel$   $\parallel$   $-C$   $-CH$   $-N$   $R^a$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$ 

$$R^{5a}$$
 is  $O$ 

$$\parallel CC_1\text{-}C_6 \text{ alkyl}, O$$

$$\parallel -COC_1\text{-}C_6 \text{ alkyl}, O$$

$$\parallel 0$$

$$\parallel -C\text{-}CH\text{-}NHCC_1\text{-}C_6 \text{ alkyl}, O$$

$$\parallel (CH_2)_n$$

$$\parallel aryl \text{ or substituted aryl, } O$$

$$\parallel CO(CH_2)_n \text{ aryl, } or$$

$$O$$

$$\parallel CO(CH_2)_n \text{ aryl, } or$$

$$O$$

R<sup>6</sup> is hydrogen,

 $C_1\text{-}C_6 \text{ alkyl, -}(\text{CH}_2)_n \text{ aryl, -}(\text{CH}_2)_n \text{CO}_2 \text{R}^a, \text{ or hydroxyl substituted } C_1\text{-}C_6 \text{ alkyl;}$ 

> each n is independently 0 to 3, and the pharmaceutically acceptable salts thereof; excluding the following compounds:

N-(3-Phenylpropionyl)-L-valine-L-alanine-L-aspartic acid 2,6-dihydroxybenzovloxymethyl ketone;

N-(3-Phenylpropionyl)-L-valine-L-alanine-L-aspartic acid 2,6-dimethylbenzovloxymethyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxycarbony-L-aspartic acid 2,6-ditrifluoromethyl benzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 2,6-dimethoxybenzoyloxy methyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 2,-dichloro-3-(benzyloxy)benzoyloxymethyl ketone:

N-Benzyloxycarbonyl-L-aspartic acid 2-acetamido-6-chlorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 2,6-difluorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 3-(N-butylsulfonamido)-2,6dichlorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 2,6-dichloro-3-sulfonamido benzoyloxymethyl

N-Benzyloxycarbonyl-L-aspartic acid 3-(N-benzylsulfonamido)-2,6dichlorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-aspartic acid 3-(N-(2-aminoacetamidoyl)-sulfonamido)-2,6dichlorobenzoyloxymethyl ketone;

N-Methoxycarbonyl-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Methoxycarbonyl glycine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Methoxycarbonyl-L-phenylalanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl

N-Methoxycarbonyl-L-valine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-valine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxycarbonyl-L-valine-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone:

N-(3-Phenylpropionyl)-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Methoxycarbonyl-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-(4-N,N-dimethylaminomethyl)benzoyl-L-aspartic acid 2,6-diclorobenzoloxymethyl ketone;

N-Benzyloxycarbonyl-D-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Methoxy-glycine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Methoxy-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Methoxy-L-valine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxy-L-valine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxy-D-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxy-L-alanine-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxy-L-valine-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;

N-Benzyloxy-D-alanine-L-alanine-L-aspartic acid 2,6-dichlorobenzoyloxymethyl ketone;



N-(N-phenylpropionyl-valinyl-alaninyl)-3-amino-4-oxo-5-(2,6-bistrifluoro methylbenzoyloxy) pentanoic acid;

N-(N-phenylpropionyl-valinyl-alaninyl)-3-amino-4-oxo-5-benzoyloxy pentanoic acid;

N-(N-Acetyl-tyrosinyl-valinyl-alaninyl)-3-amino-4-oxo-5-(pentafluorobenzoyloxy) pentanoic acid;

3-Phenylpropionyl-L-valine-L-alanine-aspartic acid 2-phenylethylcarbonyloxymethyl ketone;

Adamantane-1-carboxylic acid 3-[2-(2-benzyloxycarbonylamino-3-methyl-butyrylamino)-propionylamino]-4-carboxy-2-oxo-butyl ester;

3-[2-(2-Benzyloxycarbonylamino-3-methyl-butyrylamino)-propionylamino]-5-diphenylacetoxy-4-oxo-pentanoic acid;

2,6-Dichloro-benzoic acid 3-(5-benzyloxycarbonylamino-naphthalene-1-sulfonylamino)-4-carboxy-2-oxo-butyl ester;

2,6-Dichloro-benzoic acid 3-[2-(3-benzyloxycarbonylamino-phenyl)-propionylamino]-4-carboxy-2-oxo-butyl ester;

2,6-Dichloro-benzoic acid 3-[2-(6-benzyloxycarbonyloxy-naphthalen-2-yl)-propionylamino]-4-carboxy-2-oxo-butyl ester;

2,6-Dichloro-benzoic acid 3-(5-benzyloxycarbonylamino-naphthalene-1-sulfonylamino)-4-carboxy-2-oxo-butyl ester;

2,6-Dichloro-benzoic acid 3-[(5-benzyloxycarbonylamino-naphthalene-1-carbonyl)-amino]-4-carboxy-2-oxo-butyl ester; and

2,6-Dichloro-benzoic acid 3-[(4-benzyloxycarbonylamino-cyclohexanecarbonyl)-amino]-4-carboxy-2-oxo-butyl ester.

## 52. (Amended) A compound of the Formula I

wherein  $R^1$  is  $R^3$ OC-,  $R^3$ CO-,  $R^3$ SO<sub>2</sub>-,  $R^a$  |  $R^5$ NCH $R^6$ CO-.

$$R^{a}O \xrightarrow{C} Q \qquad NH_{2}$$

$$Q \qquad$$

each Ra is independently hydrogen, C1-C6 alkyl, or -(CH2)n aryl;

 $R^2$  is  $-(CRR)_n$ -aryl,

 $-(CRR)_n-X-aryl,$ 

 $-(CRR)_n$ -(substituted-aryl), provided that the aryl group is not substituted with alkoxy, halogen, or trifluoromethyl,

-(CRR)<sub>n</sub>-X-(substituted-aryl),

-(CRR)<sub>n</sub>-aryl-aryl,

 $-(CRR)_n$ -aryl- $(CH_2)_n$ -aryl,

 $-(CRR)_n$ -CH(aryl)<sub>2</sub>,

- $(CRR)_n$ -cycloalkyl,

-(CRR)<sub>n</sub>-X-cycloalkyl,

$$(CH_2)_n$$
—aryl

 $-(CRR)_n$ —CH

 $(CH_2)_n$ —aryl

 $-(CRR)_n$ —Substituted aryl

 $-(CRR)_n$ —CH

 $(CH_2)_n$ —aryl

 $-(CRR)_n$ —aryl

 $(CH_2)_n$ —aryl

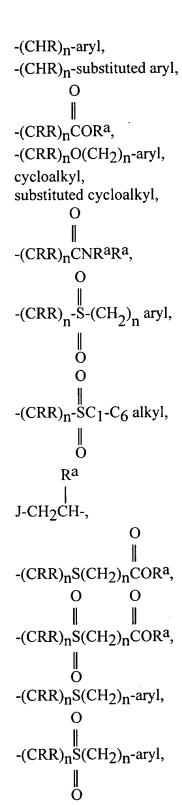
Conto

each R is independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, halogen or hydroxy;

X is O or S;

$$R^3$$
 is  $C_1$ - $C_6$  alkyl, aryl,

D'd Whid



Contd

Did Contid

each R' is independently  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkylaryl,

aryl, or hydrogen;

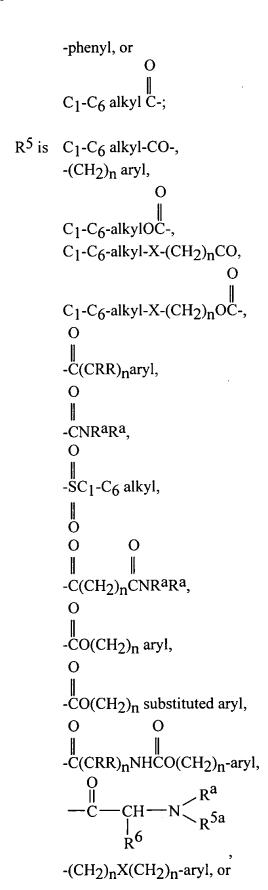
each J is independently

- $-CO_2R^b$ ,
- -CONRbRb,
- $-SO_2NR^bR^b$ , or
- -SO<sub>2</sub>R<sup>b</sup>;

each R<sup>b</sup> is independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, aryl, substituted aryl, arylalkyl, or substituted arylalkyl;

R<sup>4</sup> is hydrogen,

$$C_1$$
- $C_6$  alkyl,



-C<sub>1</sub>-C<sub>6</sub> alkyl X-C<sub>1</sub>-C<sub>6</sub> alkyl aryl;

```
\begin{array}{c} R^{5a} \text{ is} \\ O \\ \parallel \\ CC_1\text{-}C_6 \text{ alkyl}, \\ O \\ \parallel \\ \text{-}COC_1\text{-}C_6 \text{ alkyl}, \\ O \\ O \\ \parallel \\ \text{-}C\text{-}CH\text{-}NHCC_1\text{-}C_6 \text{ alkyl}, \\ (CH_2)_n \\ \parallel \\ CO(CH_2)_n \text{ aryl}, \\ O \\ \parallel \\ CO(CH_2)_n \text{ aryl}, \\ O \\ \parallel \\ C(CH_2)_n \text{ aryl}; \end{array}
```

 $R^6$  is hydrogen,  $C_1$ - $C_6$  alkyl, - $(CH_2)_n$  aryl, - $(CH_2)_n$ CO<sub>2</sub> $R^a$ , or hydroxyl substituted  $C_1$ - $C_6$  alkyl;

```
each n is independently 0 to 3, provided that when R^{5a} is O

CO(CH<sub>2</sub>)<sub>n</sub> aryl, then n is 0, 2, or 3, and provided that when R^{5a} is O

C(CH<sub>2</sub>)<sub>n</sub> aryl, then n is 0, 1, or 3,
```

and the pharmaceutically acceptable salts thereof.

### 53. (Amended) A compound of the Formula I

each  $R^a$  is independently hydrogen,  $C_1\text{-}C_6$  alkyl, or - $(CH_2)_n$  aryl;

 $R^2 \text{ is } -(CRR)_n\text{-aryl}, \\ -(CRR)_n\text{-}X\text{-aryl}, \\ -(CRR)_n\text{-}X\text{-(substituted-aryl)}, \\ -(CRR)_n\text{-aryl-aryl}, \\ -(CRR)_n\text{-aryl-(CH}_2)_n\text{-aryl}, \\ -(CRR)_n\text{-CH(aryl)}_2, \\ -(CRR)_n\text{-cycloalkyl}, \\ -(CRR)_n\text{-}X\text{-cycloalkyl}, \\ -(CRR)_n\text{-}X\text{-cycloalkyl}, \\ \end{array}$ 

$$-(CRR)_{n}-CH \\ (CH_{2})_{n}-aryl \\ (CRR)_{n}-aryl \\ (CRR)_{n}-aryl$$

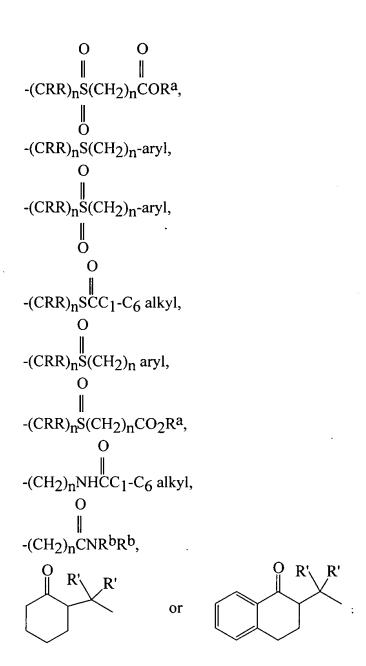
Conto

$$\mathbb{R}^4$$
 $\mathbb{R}^4$ 
 $\mathbb{R}^4$ 
 $\mathbb{C}(CHR)_n$ 
or
 $\mathbb{R}^4$ 
 $\mathbb{C}(CHR)_n$ 

each R is independently hydrogen, C1-C6 alkyl, halogen or hydroxy;

X is O or S;

$$R^3 \text{ is } C_1\text{-}C_6 \text{ alkyl}, \\ \text{aryl}, \\ \text{-}(\text{CHR})_n\text{-}\text{aryl}, \\ \text{-}(\text{CHR})_n\text{-}\text{substituted aryl}, \\ \text{O} \\ \parallel \\ \text{-}(\text{CRR})_n\text{COR}^a, \\ \text{-}(\text{CRR})_n\text{O}(\text{CH}_2)_n\text{-}\text{aryl}, \\ \text{cycloalkyl}, \\ \text{substituted cycloalkyl}, \\ \text{O} \\ \parallel \\ \text{-}(\text{CRR})_n\text{CNR}^a\text{R}^a, \\ \text{O} \\ \parallel \\ \text{-}(\text{CRR})_n\text{-S-}(\text{CH}_2)_n \text{ aryl}, \\ \parallel \\ \text{O} \\ \text{CRR})_n\text{-SC}_1\text{-C}_6 \text{ alkyl}, \\ \parallel \\ \text{O} \\ \text{R}^a \\ \text{J-CH}_2\text{CH-}, \\ \text{O} \\ \parallel \\ \text{-}(\text{CRR})_n\text{S}(\text{CH}_2)_n\text{COR}^a, \\ \end{pmatrix}$$



CONF.

each R' is independently C<sub>1</sub>-C<sub>6</sub> alkyl,

 $C_1$ - $C_6$  alkylaryl,

aryl, or

hydrogen;

each J is independently

-CO<sub>2</sub>Rb,

-CONRbRb,

-SO<sub>2</sub>NR<sup>b</sup>R<sup>b</sup>, or

 $-SO_2R^b$ ;

each Rb is independently hydrogen, C1-C6 alkyl, aryl, substituted aryl, arylalkyl, or substituted arylalkyl;

 $\begin{array}{c} R^{5a} \text{ is} \\ O \\ \parallel \\ CC_1\text{-}C_6 \text{ alkyl}, \\ O \\ \parallel \\ -COC_1\text{-}C_6 \text{ alkyl}, \\ O \\ O \\ \parallel \\ \parallel \\ -C\text{-}CH\text{-}NHCC_1\text{-}C_6 \text{ alkyl}, \\ \parallel \\ (CH_2)_n \\ \parallel \\ CO(CH_2)_n \text{ aryl, or } \\ O \\ \parallel \\ CO(CH_2)_n \text{ aryl, or } \\ O \\ \parallel \\ C(CH_2)_n \text{ aryl;} \end{array}$ 

 $R^6$  is hydrogen,  $C_1$ - $C_6$  alkyl, - $(CH_2)_n$  aryl, - $(CH_2)_n$ CO<sub>2</sub> $R^a$ , or hydroxyl substituted  $C_1$ - $C_6$  alkyl;

each n is independently 0 to 3,

provided that when R<sup>5a</sup> is

O

CO(CH2)n aryl,
then n is 0, 2, or 3, and

provided that when  $R^{5a}$  is O  $\parallel$   $C(CH_2)_n$  aryl, then n is 0, 1, or 3, and the pharmaceutically acceptable salts thereof.

#### 54. (Amended) A compound of the Formula I

wherein 
$$R^1$$
 is  $R^3$ OC-,  $R^3$ SO2-,  $R^3$ SO2-,  $R^3$ OC-,  $R^3$ O

each  $R^a$  is independently hydrogen,  $C_1$ - $C_6$  alkyl, or -(CH<sub>2</sub>)<sub>n</sub> aryl;

 $R^2$  is  $-(CRR)_n$ -aryl,

> $-(CRR)_n$ -X-aryl, -(CRR)<sub>n</sub>-X-(substituted-aryl),  $-(CRR)_n$ -aryl-aryl, - $(CRR)_n$ -aryl- $(CH_2)_n$ -aryl,  $-(CRR)_n$ -CH(aryl)<sub>2</sub>, -(CRR)<sub>n</sub>-cycloalkyl, -(CRR)<sub>n</sub>-X-cycloalkyl,  $-(CRR)_{n}^{} - CH_{2}^{})_{n}^{} - aryl$  $(CH_2)_n$  aryl, (CH<sub>2</sub>)<sub>n</sub>—substituted aryl -(CRR)<sub>n</sub> -(CRR)<sub>n</sub> CH NH aryl , (CRR)<sub>n</sub> (CRR)<sub>n</sub>

> > (CRR)<sub>n</sub>

·(CRR)<sub>n</sub>·

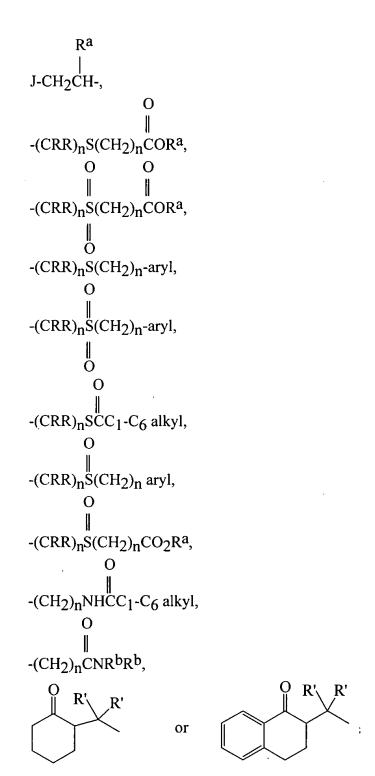
$$-(CRR)_n$$
, or  $R^4$ 
 $N$ 
 $(CHR)_n$ - or  $N$ 
 $(CHR)_n$ -  $N$ 

each R is independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, halogen or hydroxy;

X is O or S;

$$R^{3} \text{ is } C_{1}\text{-}C_{6} \text{ alkyl}, \\ \text{aryl}, \\ \text{-}(CHR)_{n}\text{-}\text{aryl}, \\ \text{-}(CHR)_{n}\text{-}\text{substituted aryl}, \\ O \\ \parallel \\ \text{-}(CRR)_{n}COR^{a}, \\ \text{-}(CRR)_{n}O(CH_{2})_{n}\text{-}\text{aryl}, \\ \text{cycloalkyl}, \\ \text{substituted cycloalkyl}, \\ O \\ \parallel \\ \text{-}(CRR)_{n}CNR^{a}R^{a}, \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}S\text{-}(CH_{2})_{n} \text{ aryl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}SC_{1}\text{-}C_{6} \text{ alkyl}, \\ \parallel \\ O \\ O \\ \parallel \\ \text{-}(CRR)_{n}\text{-}CRR)_{n}\text{-}CRR$$

Conti



each R' is independently C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkylaryl, aryl, or hydrogen;

each J is independently  $\begin{array}{c} -\mathrm{CO}_2 R^b, \\ -\mathrm{CONR}^b R^b, \\ -\mathrm{SO}_2 N R^b R^b, \text{ or } \\ -\mathrm{SO}_2 R^b; \end{array}$ 

each R<sup>b</sup> is independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, aryl, substituted aryl, arylalkyl, or substituted arylalkyl;

 $\begin{array}{c} \mathrm{R}^4 \text{ is hydrogen,} \\ \mathrm{C}_1\text{-}\mathrm{C}_6 \text{ alkyl,} \\ \mathrm{O} \\ \parallel \\ \mathrm{CH}_3\mathrm{OC}\text{-,} \\ \text{-phenyl, or} \\ \mathrm{O} \\ \parallel \\ \mathrm{C}_1\text{-}\mathrm{C}_6 \text{ alkyl C-;} \end{array}$ 

C1-C6 alkyl-C0-,
-(CH<sub>2</sub>)<sub>n</sub> aryl,

O

C1-C6-alkylOC-,
C1-C6-alkyl-X-(CH<sub>2</sub>)<sub>n</sub>CO,

O

C1-C6-alkyl-X-(CH<sub>2</sub>)<sub>n</sub>OC-,
O

C1-C6-a

O O 
$$\parallel$$
  $\parallel$   $\parallel$   $-C(CH_2)_nCNR^aR^a$ , O  $\parallel$   $-CO(CH_2)_n$  aryl, O  $\parallel$   $-CO(CH_2)_n$  substituted aryl, O O  $\parallel$   $\parallel$   $\parallel$   $-C(CRR)_nNHCO(CH_2)_n$ -aryl, O  $-C$   $-CH$   $-N$   $R^a$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$   $R^6$ 

$$\begin{array}{c} {\rm R}^{5a}\,{\rm is} \\ {\rm O} \\ \parallel \\ {\rm CC}_1\text{-C}_6\,{\rm alkyl}, \\ {\rm O} \\ \parallel \\ {\rm -COC}_1\text{-C}_6\,{\rm alkyl}, {\rm or} \\ {\rm O} \\ {\rm O} \\ \parallel \\ \parallel \\ {\rm -C-CH-NHCC}_1\text{-C}_6\,{\rm alkyl}, \\ \parallel \\ {\rm (CH}_2)_n \\ \parallel \\ {\rm aryl\,\,or\,\,substituted\,\,aryl;} \end{array}$$

Concid

 $R^6$  is hydrogen,  $C_1$ - $C_6$  alkyl, - $(CH_2)_n$  aryl, - $(CH_2)_n$ CO<sub>2</sub> $R^a$ , or hydroxyl substituted  $C_1$ - $C_6$  alkyl;

each n is independently 0 to 3, and the pharmaceutically acceptable salts thereof.

#### Please add new claims 55 - 61 as follows:

- (New) A pharmaceutically acceptable ester, amide, or prodrug of a compound of formula I according to Claim 1, wherein said ester is a C<sub>5</sub>-C<sub>7</sub> cycloalkyl ester or an arylalkyl ester.
- 56. (New) The pharmaceutically acceptable ester of a compound of formula I according to Claim 55.
- 57. (New) The pharmaceutically acceptable amide of a compound of formula I according to Claim 55.
- 58. (New) The pharmaceutically acceptable prodrug of a compound of formula I according to Claim 55.
- 59. (New) The pharmaceutically acceptable amide of a compound of formula I according to Claim 57, wherein said amide is derived from ammonia, primary C<sub>1</sub>-C<sub>6</sub> alkyl amines, and secondary C<sub>1</sub>-C<sub>6</sub> dialkyl amines; wherein the alkyl groups are straight or branched chain.
- 60. (New) The pharmaceutically acceptable amide of a compound of formula I according to Claim 57, wherein said amide is derived from ammonia, primary C<sub>1</sub>-C<sub>3</sub> alkyl amines, and secondary C<sub>1</sub>-C<sub>2</sub> dialkyl amines; wherein the alkyl groups are straight or branched chain.
- 61. (New) The pharmaceutically acceptable prodrug of a compound of formula I according to Claim 55.

